

Amendments to the Specification:

Please replace the paragraph on page 6, lines 7-21 with the following:

Because the controller 120 monitors the input power supply signal, the controller 120 can selectively control the operation of the charging switch 122 and the second switch 124 based on the voltage level of the input power supply signal. As an example, if the voltage level of the input power supply signal drops to a predetermined level, the controller 120 can turn off or deactivate the charging switch 122 and/or the second switch 124. When the voltage level of the input power supply signal reaches the predetermined level, the controller 120 can turn on or activate the charging switch 122 and/or the second switch 124. In view of this arrangement, the capacitor C_1 is not required to deliver the charging current to the battery 110 when the voltage level of the input power supply signal drops to and below the predetermined level. As a result, the value of the capacitor C_1 , and hence its physical dimensions, can be reduced as compared to a capacitor C_2 that would provide charging current when the input power supply signal drops below the predetermined level.

Please replace the paragraph on page 9, lines 11-22 with the following:

Selectively activating and deactivating the charging switch 122 in accordance with the above discussion can reduce the value of the capacitor C_1 . More specifically, the minimum value of the capacitor C_1 can be reduced to the value required for the capacitor C_1 to maintain the voltage necessary to indicate to the controller 120 that the portable electronic device is being charged. This reduction in value is made possible primarily because the capacitor C_1 no longer has to maintain a voltage level to continue the charging of the battery 110 when the input power supply signal 300 decreases. The minimum value required of the capacitor C_1 can be reduced as compared to the minimum value required of a capacitor C_2 that would supply charging current when the input power supply signal 300 drops below the second predetermined threshold 316.